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Northern Grown New Land
STRAWBERRY
And Other Small Fruit Plants

HARDY PLANTS - BIG PROFITS

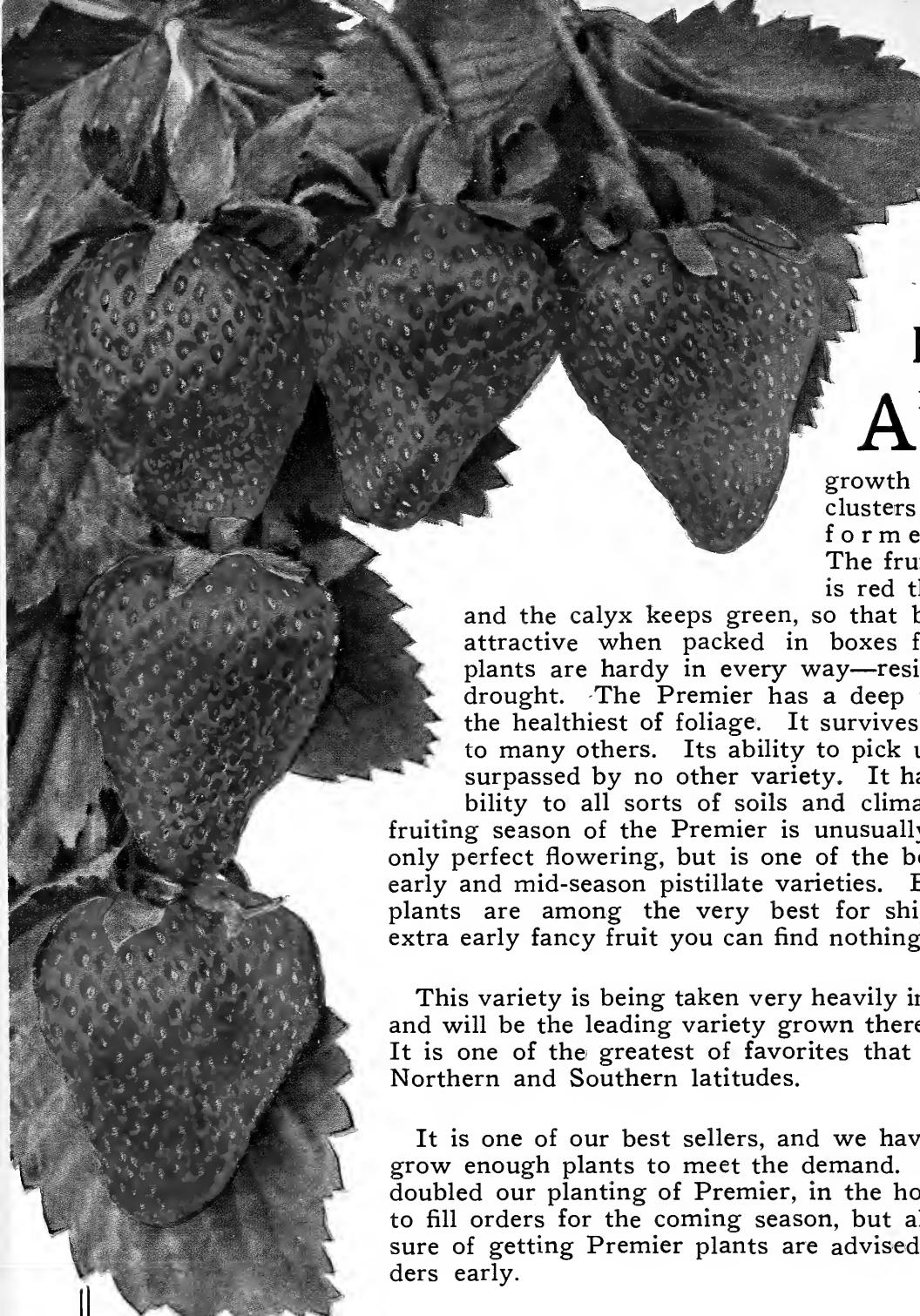
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U. S. Department of Agriculture



Burmeister & Hartung
Onekama, Michigan



The Premier Strawberry

Is the
BEST EARLY

ALL B. & H. Premier Strawberry Plants have a heavy leaf growth that protects great clusters of deep red, finely formed, luscious berries. The fruit ripens extra early, is red through and through,

and the calyx keeps green, so that berries are unusually attractive when packed in boxes for market. Premier plants are hardy in every way—resist frost, disease and drought. The Premier has a deep rooting system with the healthiest of foliage. It survives frosts that are fatal to many others. Its ability to pick up after a drought is surpassed by no other variety. It has proved its adaptability to all sorts of soils and climatic conditions. The fruiting season of the Premier is unusually long, and it is not only perfect flowering, but is one of the best of pollenizers for early and mid-season pistillate varieties. Berries from Premier plants are among the very best for shipping. If you want extra early fancy fruit you can find nothing better.

This variety is being taken very heavily in the Southern States and will be the leading variety grown there within a few years. It is one of the greatest of favorites that we know of in both Northern and Southern latitudes.

It is one of our best sellers, and we have never been able to grow enough plants to meet the demand. We have more than doubled our planting of Premier, in the hope of having enough to fill orders for the coming season, but all who wish to make sure of getting Premier plants are advised to send us their orders early.

STATE DEPARTMENT OF AGRICULTURE

No. 2608

CERTIFICATE OF NURSERY INSPECTION

This is to certify, that I have examined the nursery stock of Burmeister & Hartung, Onekama, Michigan, and find it apparently free from dangerous insects and dangerously contagious tree and plant diseases.

This certificate to be void after July 31, 1923.

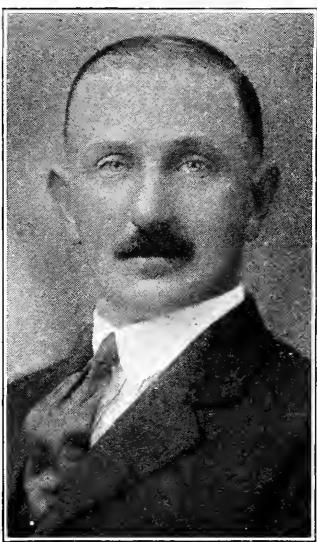
BUREAU OF FOODS AND STANDARDS,
W. P. Hartman, Director.
Lansing, Mich., October 17, 1922.

To Our Friends, Old and New



W. B. Burmeister

WE COUNT as old friends all those who have favored us with their patronage. It has been our constant effort to win and hold the confidence of everyone who has been directed to the B. & H. headquarters for quality plants. We are made proud and happy by the many written testimonials from pleased customers in many states, both far and near, assuring us that they have found the quality of our plants unexcelled. We merely want the opportunity to put to the test the merits of our plants. The best part of our battle is won when our plants have been shipped. Those who once enjoy the pleasure of



A. J. Hartung

growing successful fields of B. & H. strawberries are our loyal friends and they insist each year on obtaining more plants of the same reliable quality. That is why we count all our customers as our friends.

In this year 1923 we hope to be given many opportunities to make new friends. We are confident of winning and holding the friendship of all who test the quality of B. & H. plants.

We aim in this catalog to give valuable information and advice. We paint no extravagant pictures merely to attract notice. You will find statements herein are backed by facts. We list nothing that is not as we represent it to be. We desire in all our dealings as well as in this catalog to be of service to all customers.

Our chief object is to supply our customers with quality plants that will make their venture a success. We realize that our success depends upon the success of our customers with our plants. As they succeed our success grows greater each year.

B. & H. NURSERIES.

Burmeister & Hartung, Proprietors.

What Our Guarantee Means to You

We guarantee to give you satisfaction or refund your money. From planting time to digging time we do everything possible to make our plants the high quality, heavy producing plants that they are. We are so sure they will

meet with your approval that we guarantee to return your money upon return of the plants to us. Do not overlook the important fact that the guarantee covers insurance that you are buying plants true to name.

OUR GUARANTEE

We guarantee our plants to be true to name and to satisfy you in every way. On arrival if these plants do not come up to your expectations ship them back to us and we will refund your money.

BURMEISTER & HARTUNG.

When you are through with this catalog please hand it to a neighbor. It may prove a benefit to the neighbor and we will gladly send you another one.

History of the Strawberry

"Doubtless God could have made a better berry, but God never did."

THE ABOVE was written by Dr. William Butler more than three hundred years ago. Since his day strawberries and most other fruits have been improved. The many varieties of strawberries we know today have been developed from two American species and several foreign species. One of the foreign varieties that has helped to give character to the modern fruit came from Chile.

It is interesting to know that *Fragaria*, the Latin name of the strawberry, is based upon its fragrance. Presumably the characterless name "strawberry" was adopted from a frequent custom of mulching the plants with straw.

Certain varieties of strawberries will never bear fruit if they grow by themselves as no blossoms are fertilized. Those varieties are classed as pistillate, imperfect, or female. Other varieties have both male and female organs in the blossoms and are classed as perfect, staminate, bisexual, or male. When planting pistillate varieties it is necessary to put an occasional row of staminate plants from which the wind and the bees will carry the pollen. Usually one row of staminate plants is sufficient to pollinate three or four rows of pistillate varieties. We find the staminate varieties more easily grown and generally more profitable.

Good Plants Half the Battle

Fine crops of strawberries CAN NOT be grown from poor plants

EVERY successful grower will tell you that it is a waste of time and money to put cheap strawberry plants into the ground. We mean by cheap plants those that are grown in a cheap, haphazard way. Those who plan to save in cost of plants often find that the plants of lowest price have been too cheap to be good. We do not wish to argue for high prices but we do urge the wisdom of selecting high quality plants and we stake our reputation on sending out plants of highest quality. On top of that we have been able to make our prices fair and attractive

to you and modestly profitable to us.

As proof of the pudding is in the eating so the proof of the wisdom of planting B. & H. quality plants is given at fruiting time. If you want to make this fact clear you have only to set out a plot of unselected plants of uncertain origin and then put next to that plot a field of B. & H. plants. Results with B. & H. plants will always prove their value. Our customers have proved the quality of our plants and they will therefore continue to plant them. We want those who have not tried them to give them a trial.

Orders Filled Promptly

is a service which every buyer appreciates. When you send in your order do not forget to mention the date upon which you want us to ship your plants and we will make every effort to get them out on time. We have wonderful facilities for handling your orders, including a staff of experienced helpers. Our season for digging and shipping plants starts about April 1st and continues to about May 10th to 15th.

We pride ourselves on promptly getting out plants ordered by customers. This





Plowing under green cover crops for fertilizer on B. & H. farms

Improving on Nature's Work

JUST as wheat has been developed from wild grass, man improves what Nature has put before him. No man can make the tiniest seed no matter how simple a thing it looks to be, but by selection, hybridization and cultivation he can improve Nature's first work. Burbank as Nature's midwife in the discovery of new children of the soil wins renown as a wizard. Mysterious natural agencies lie dormant in each bit of earth. Some of the secret springs are uncovered by the farmer who works with his brain as well as with his hands. We are thrilled by discoveries of science and invention, the harnessing of electricity, control of airships, wireless messages, and achievement of the radio, but none of those who have made the

world marvel with these things can make a seed that will produce a pumpkin or poppy or potato or anything little or large that is given the magic of life by a tiny seed put in the ground.

But there is individuality in plants as in people. Many characteristics of the human races are due to crossing of various earlier types. In like manner distinctive qualities of strawberry plants are obtained and held by crossing or hybridization of different varieties. Through frequent association you come to know by some little personal characteristics persons who at first seemed just like many others. Through our familiarity with strawberry plants we learn to know to which family each one belongs.

Prizes for Your Ideas

WE DON'T profess to know all that can be learned. Many persons have practical and valuable ideas that we would gladly make use of. We are willing to pay for the privilege of using such ideas.

You may be able to tell us how we can improve our service to our customers. We want to know how you feel after you have done business with us. We want to know how our plants reach you; whether the packages appear suitable to you and whether you think the packing of plants could be done in some better way. Write and let us know your views.

To the person sending us the best suggestion, which will help in any way to improve our service to our customers, we will give a

first prize of \$25 worth of plants to be selected by the winner of the prize.

To the person sending the next best suggestion we will give a second prize of \$15 worth of plants to be selected by the winner.

To the person sending the third best suggestion we will give a third prize of \$10 worth of plants to be selected by the winner.

Names of these three prize winners and their suggestions for our guidance will be printed in our catalog next year.

Besides these three prizes we will give ten other prizes of one dozen gladiolus bulbs of our selection to the next ten persons who have sent us valuable suggestions but have not won the larger prizes.

We are glad at all times to welcome visitors and to show them over the B. & H. farms and nurseries. We have many visitors almost every day during the growing season. Let us know when you are coming and we will meet you at the station if necessary and show you around. One morning this last season more than twenty automobiles brought visitors to our farms before 9:30 in the morning.

Picking, Packing and Marketing

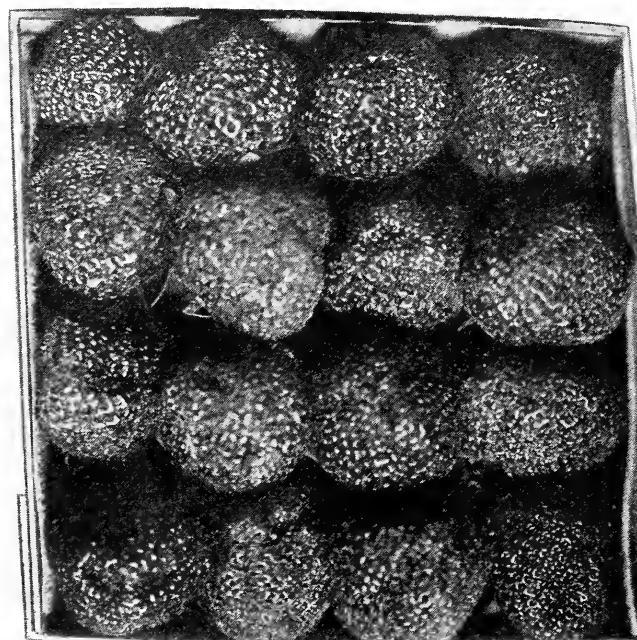
AFTER you have gone to the trouble and expense of bringing near to perfection the finest of fruit it would be poor judgment to neglect the right methods of picking, packing and marketing. It would be too much like having the cow kick over the pail full of nice, rich milk to spoil everything after caring for the best of plants on ideal soil. We are going to give you a few important pointers on this subject, tell you a few things that you ought to do and give you a few "don't's" that may prove of value to you.

Always bear in mind that strawberries are not a hard fruit like apples, but soft and quickly perishable and must be handled accordingly. It is only by doing all things well that we achieve our greatest success in the growing and selling of fine fruit.

When you are shipping to a distant market berries must be picked before they are fully ripe or they will be over-ripe and soft or possibly unsalable before they reach the consumer. For home use they may become dead ripe and will be of richer flavor. Redness will not always mean ripeness as some varieties will color well before they are ripe, some will color well during shipment when picked partly green and others will not color any after they are picked. Where growers are close to their markets the berries are picked when colored all over. The best time for picking is early morning as berries are in better condition to ship when they are firm and exposure to the sun causes them to soften. Some growers pick every day regardless of wet weather but for shipping in refrigerated cars the berries will not be so desirable if they are picked wet. Berries ripen faster in hot weather and may require more frequent picking to prevent their getting over-ripe.

In picking strawberries the stem should be pinched off a half inch from the berry. Fruit does not carry so well when pulled off as it is likely to bleed and it is found that short stems prevent berries from packing too tightly in the box. We never allow the pickers while picking to fill their hands before putting the berries in the box. The fingers need hardly touch them and they should be laid in, not thrown in for they are almost as liable to injury as eggs. A great many pickers would be losing money for the grower if they worked for nothing. On the other hand those pickers who take pride in their work and pick their berries carefully will easily earn their pay, for the berries they pick will sell for more money than those that are poorly picked.

Properly Packed Box of Magic Gem



Properly Packed Box of Aroma

Most successful strawberry growers grade their fruit in the face of the quart boxes before shipping. It sells better when of uniform size and color. Over-size berries are found undesirable as well as under-sized ones. When the market is some distance away, the riper fruit is disposed of at home. Some of the big shipping associations have fixed grades for both Fancy and No. 1 berries that call for five rows of five berries each row. No other grades are wanted and may be sent back to the shipper. Some other sections have grades of 4-by-4 and 4-by-5 as well as 5-by-5 boxes.

Facing of the boxes is found not only to add to the appearance of your berries, but it prevents their being so badly shaken on the way to market. In some big berry growing districts much of the grading is done in sheds, but pickers who



Fine Heritage berries, but too large for the face

circulates freely. When berries can be well cooled sent when warm from the vines.

Crates in less than carload lots are usually sent by express, or by boat if in the Great Lakes district. We do not recommend freight shipments of berries. Express is much better. If distance requires more than 24 hours, fruit should be sent in refrigerator cars. Those who grow a small acreage of strawberries will probably do better if they can sell to retailers near their home. In most big markets strawberries ought to be in market by about 4 o'clock in the morning to catch the trade of high quality dealers. Late arrivals usually fall into the hands of peddlers and canners and those to whom low prices are more attractive than high quality.

Shippers will find it best to continue business with the same agents as new agents cannot have so much confidence in the quality of their fruit. It takes time to work up a reputation for an honest pack and all this is lost when shipments are made to new agents.

DON'T ship your berries in poor, cheap crates. An attractive crate often will pay for itself in high returns.

DON'T have your crates all stained with berry juice. Even if the berries are firm the commission man and purchasers will think they are soft.

DON'T ship in dirty boxes. They scare customers away.

DON'T let berries stand in the sun. Put them in a cool place soon as possible after they are picked.

DON'T ship fruit at a time to land it at any market place on a holiday. Saturday also is usually a bad day unless it can arrive early and you wire your dealer so that he can make sale before berries arrive.

DON'T pick berries without stems or hulls. They will get mussy that way.

DON'T put any over-ripe or cull fruit or hard, green berries in the box and cover them with fine fruit. You will be very soon discovered and your reputation ruined as a grower.

We will be glad to advise you further on any point relating to strawberries.

are quick to get the knack soon learn to grade as they pick and turn in almost as much as if they put all in one box. This avoids extra handling of the fruit which generally is hurtful. Soon as graded they should be put in a cool place.

Berries that form the face should be laid in snugly without force and extend not more than three-eighths of an inch over the top as they will settle very little when rightly packed and any that reach out and are crushed will stain the containers. In placing facing berries, stems should never be up. Berries that are round-conic, like the Brandywine, Aroma and Gibson, should be put with the stem down. See illustration of box of Aroma berries. Premier, Heritage and other long berries make attractive faces when placed on their sides with the stems all turned in the same direction. See our illustration of a face of Premier strawberries.

As sun and wind discolor berries after picking it is important to shelter them when there is much delay between picking and shipping. Any cool shed or shaded place will do for a time if the air over night they will ship better than if



Properly Packed Box of Premier

How to Plant and Grow Strawberries

The soil and location best adapted to strawberry culture will vary somewhat in different sections. In a general way we have said that any soil that will grow good crops of corn or potatoes would grow good strawberries, and while this seems to be a pretty safe rule, it is also true that in order to grow them to the best advantage it is necessary to have the soil especially adapted. One of the first requisites of the ripening fruit is moisture, and care should be taken that this is provided. Hence, a very dry or loose, sandy soil would not be a safe location, although in moist seasons a fair crop might be harvested. Neither is a stiff clay adapted to strawberry growth, as very early in season it cannot be worked without becoming cloddy, and later is apt to bake, and the plants will suffer more than on sandy soil. It would seem that a sandy loam or loam with slight mixture of clay should if properly handled give the best results.

Draining. Having chosen a soil retentive of moisture, it next becomes necessary to prepare for proper drainage in case of excessive rainfall, unless the natural lay of the land is such that no water will stand upon the surface. Tile drains are the only practical ones to use. Open ditches will, perhaps, answer this purpose, but are unsatisfactory in many ways.

Frost. In planning your strawberry field, care should be taken to avoid frosty locations, such as very low land near marshes or lakes, also valleys where there is no chance for circulation of air, as these localities are very liable to heavy frosts, when higher land or that more open to circulation would show little, if any. A hard frost at blossoming time often ruins the entire crop.

Manuring. Where the soil is at all deficient in fertility, we advise using well-rotted stable manure. If this can be applied to the soil the year previous and some cultivated or hoed crop grown, then the following season the land must be in the best possible condition for setting strawberries. Some writers advocate the plowing under of a clover sod in preparation for this crop, but we are doubtful of this method on account of the white grub, the larva of the May beetle, which is quite apt to infest such soil. Perhaps if only recent seedlings were so treated this pest would not trouble, but we would warn all against plowing up an old sod to set strawberries, as the grubs would be almost sure to destroy the greater portion of the plants set. Never plow under green or very coarse manure just before setting strawberry plants, as it would cause the soil to dry out very quickly and will also burn the roots, killing the plants wherever it comes in contact with them. This is important and should be avoided if possible. Any good commercial fertilizer may be used. This should be sown broadcast on land after plowing, and well harrowed in, or may be worked into the soil along the row after the plants are set, care being taken that it does not burn the foliage.

Fitting the Soil. Begin by plowing as late in the fall as possible before the ground freezes. This late plowing is beneficial in that the soil lays up loose and open that frost may act upon it more readily, also leaving it in condition to absorb more moisture in the spring which may be drawn upon later in the season in case of drought. It also tends to kill a great many insects which live over winter in the soil, some of which are quite troublesome and injurious to strawberry growth.

Plow as deep as practicable, eight inches at least, unless this brings the subsoil to the surface, which should not be done under any circumstances. As soon in the spring as the season has fairly opened, just as early as the soil will work up mellow, the land should be thoroughly harrowed, followed immediately with a heavy roller or plank drag. This firming the soil is important, as it is almost impossible to set plants properly if the soil is not reasonably level and firm at the surface. If the surface soil should become too dry and loose, it may be necessary to wait for a shower before setting the plants.

Marking Out. This may be done in any manner that will give a very shallow, straight mark to set by. A light sled marker that will make three or four marks at once is very handy and could be made by almost anyone. In garden culture a line may be used.

Hill Culture, which consists of growing the single plants, cutting off all runners as fast as made, which causes the plants to "stool out" or grow additional "crowns" which will each produce fruit stems, the rows should be from two and one-half to three feet apart and fifteen to eighteen inches in the row. If to be cultivated both ways, or in checks, two to two and one-half feet would be right. We recommend this method to all those who wish to grow fancy berries and are willing to give the extra culture needed. This system requires a rich or fertile soil.

The Hedge Row is quite similar to hill culture. The rows should be from two and one-half to three feet, and twenty to thirty inches in the row; the freer runners the greater distance. The first runners are turned in the row and held in place with soil until they have struck root,

generally about every six or eight inches in nearly a straight row, later all extra runners are kept cut off. This is easily done with a good sharp hoe.

The Half Matted Row should be set about three and one-half feet apart and eighteen to twenty-four inches in the row. The runners are all kept off until about the middle of summer, then allowed to root until row is about one foot wide, after this all runners should be cut off. This gives a fine show for fruit.

The Matted Row is the system adopted by the greatest majority of fruit growers, although without doubt other methods would prove more profitable. The rows are set four to four and one-half feet apart, and plants from twenty to thirty inches in the row. The runners are all allowed to root, running the cultivator always in the same direction and narrowing it up as required. At times, if the season happens to be favorable to plant growth, and the soil is rich, almost the entire surface will be covered with plants. This method might be allowed on poor soil where fewer plants would be grown, or with varieties that make few plants.

Setting Out. We use a common garden spade for opening the holes, which is done just ahead of the setting, not leaving them to dry out. In doing this the operator proceeds along the row, thrusting the spade in the center of the mark already laid out, spacing equal distances according to methods chosen, quite close if to be grown in hills, and further if for matted row.

This should be nearly the depth of the spade, and if the soil is properly prepared this will not require much effort, but if the soil should be very solid it will require some pressure of the foot.

The spade should be given a slight motion away from, then back toward the operator; when withdrawn, if the conditions are right, you will have a V-shaped opening which will readily receive the roots of the plants. Care should be taken not to weave the spade back and forth too much, as this tends to open too wide a space at the bottom of the hole, making it hard to close properly, and leaving a chance for air space, causing plants to dry out and die.

The greatest pains should be taken in getting the plants into the soil, and here is where you should place your most careful workmen; or better still, do this part yourself. Have the plants set in a shallow basket or other receptacle, with the roots moistened—if the roots are very long they should be cut back to about four inches. The plants should be held by the upper part of the crown, and placed in the spade opening at about the same depth it grew, which would bring the crown even with the surface; now let the operator press the soil firmly against the plant with a good strong pressure of the foot, being careful to see that the opening is entirely closed that air may not enter and dry out the roots.

Cultivation. As soon after setting as practicable, the surface soil should be stirred very shallow, being careful not to disturb the roots of the plants, also not to cover up the crown or heart of the plant; the latter will cause the plant to die, especially in damp weather, by rotting or smothering the crown. This early cultivation is essential for several reasons: First, to be sure that all the openings near the plants are filled, also to preserve moisture if the weather is dry, by arresting evaporation through capillary attraction. This cultivation should be kept up through the season, never allowing the surface to crust. However, it is necessary to do some hand work with the hoe in order to loosen all the surface and keep down weeds. The latter is very important.

The blossoms should be pinched out of all spring-set plants, as it is not advisable to let them ripen fruit the first season, as it weakens the growth of the plants, and is liable to kill them outright.

All runners should be cut off until the first of July, when if matted row is wanted, the runners may be allowed to root until the desired row is obtained, after which all runners should be kept trimmed off.

Mulching or Winter Covering. As soon as growth ceases in the fall and before ground freezes hard, the surface of the field should be well covered with some sort of mulching; either long straw, wild hay, corn stalks, or other litter, if free from foul weed seed, will answer the purpose. We advise spreading hay or straw when slightly damp, if possible, and place a little soil on the top at short intervals, which will help to keep it in place in case of high wind.

Some advise using coarse stable manure as a covering and if free from grass seed this might be advisable, as it would both fertilize and protect the vines from frost. However, we generally "fight shy" of stable manure on plants that we wish to fruit the second season or for longer period, as we have sometimes seen a good stand of clover and timothy on what was supposed to have been a strawberry field. As soon as growth commences in the spring this covering should be taken nearly or entirely off the plants, but may be left between the rows as a mulch to preserve moisture, also to keep the fruit clean at picking time.



Senator Dunlap Strawberries

Anxious to Correct Mistakes

WE MAKE constant effort to avoid mistakes. If we pretended that we never made a mistake you would doubt it. In handling our big business somebody will sometime make a wrong move. We are proud to be able to say that we have had few mistakes made. We are more proud to be able to say that in every case where any mistake has been made we have more than satisfied the customer who had not received what he should have received in the first place.

We are more concerned about avoiding and correcting mistakes than any customer can be. Our greatest anxiety is to satisfy and please all customers. We want to win and hold their good will. We want to avoid risk of losing a friend anywhere and we aim to make an unquestioned reputation for satisfactory service to customers while winning new friends by the outstanding quality of Burmeister & Hartung plants.

DISTANCE FOR PLANTING

Grapes—Rows 8 to 10 feet apart, 10 to 12 feet in the row.

Raspberries—Rows 5 to 9 feet apart, 3 to 8 feet in the row.

Strawberries for matted row system— $3\frac{1}{2}$ feet apart, $1\frac{1}{2}$ feet in the row.

Strawberries for the hill system—2 or $2\frac{1}{2}$ feet apart, 15 inches in the row.

NUMBER OF PLANTS REQUIRED TO PLANT ONE ACRE

1 by 1 foot	43,560	4 by 4 feet	2,722
2 by 1 foot	21,780	5 by 1 foot	8,712
2 by 2 feet	10,890	5 by 2 feet	4,356
3 by 1 foot	14,520	5 by 3 feet	2,904
3 $\frac{1}{2}$ by 1 $\frac{1}{2}$ feet	8,712	5 by 4 feet	2,178
3 by 2 feet	7,260	5 by 5 feet	1,742
3 by 3 feet	4,840	6 by 1 foot	7,260
4 by 1 foot	10,890	6 by 2 feet	3,630
4 by 2 feet	5,445	6 by 3 feet	2,420
4 by 3 feet	3,630	6 by 4 feet	1,815

Rule for determining the number of plants required to plant one acre not mentioned in above table. Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and the product will be number of square feet for each plant or hill; which, divided into the number of square feet in an acre (43,560), will give the number of plants for an acre.

How to Handle Everbearing Strawberries

AFTER many years of experimenting we have found that we obtained our best results from the everbearing strawberries by pinching the blossoms off from one half of the field until August 1 and from the other half at least a week or sometimes two weeks later; that is to say until August 7th or 15th. Do not be afraid to keep all blossoms picked until these dates. We have proved

that by pinching blossoms off in this manner there will be larger berries and more of them. In warm weather you should pick the berries every three days. In cool weather pick every five to six days. It is also very important that during warm weather you do not neglect picking every three days or the berries will get over-ripe and you will suffer a loss.

Become familiar with the merits of B. & H. strawberry plants by actually planting them. Watch results closely and then judge for yourself. Your answer will be that no better plants are grown. If B. & H. could grow better plants they certainly would grow them. "The proof of the pudding is in the eating." The proof of the excellent quality of our plants is in the growing. We have many letters from satisfied growers who find delight in telling us that our plants have grown splendidly.

B. & H. Everbearing Strawberries

ONLY a few years ago everbearing strawberry plants were scarce enough to be regarded as a curiosity. Now they are grown by countless millions in several states, extensively by farmers. As an indication of the great demand for everbearers Burmeister & Hartung filled an order from one customer last spring for more than a half million plants of one variety.

Champion

*Everbearing
Staminate, or Perfect
Flowering*

CLAIMS made for the Champion when it was first introduced seemed extravagant, but careful tests have proved its earliest advocates gave only merited praise. On one plant of this variety 250 berries were grown and ripened in one season. The berries are of the highest quality, dark red and of good size, some growers going so far as to class them superior in some respects to Progressive. Two years ago Edward L. Lubke, who introduced the Champion in southern Michigan, picked 5,623 quarts from 17,000 Champion plants on an acre of ground and broke the national record by his receipt of \$2,059.20 for the same. The plants were set in the spring of 1920. Three months later picking was started and kept up for 129 days—more than four months. Somebody always is finding another plant better than all that had gone before and Burmeister & Hartung always are awake to the advantage of having a liberal share of these better things for their customers. From plants obtained soon after the first word was given out about the Champion, Burmeister & Hartung set out large fields from which we will this spring of 1923 be able to supply many of our customers. These plants will be an improvement on the original stock because of their northern growth. It is interesting to know that all Champion



Experimental Plot of Number 999 Everbearing Strawberries on the B. and H. Farms

plants have been produced from two plants sent in winter through the mail in 1915 to Mr. Lubke. He kept them all winter in an old coffee pot in the cellar, occasionally watering them. They proved their hardihood by living until he could plant them out of doors. In later tests the Champion exceeded all expectations, bearing heavily even through a period of unusual drought. For best results with this or any everbearing strawberry set plants in fertile soil and keep it thoroughly cultivated. Pick off blossoms until early or middle July the first year and you will have a good crop of fruit in fall months. The Champion is perfect flowering and can be planted alone.

Number 999

Everbearing Stamineate, or Perfect Flowering

NUMBER 999 is the name given by a veteran grower of strawberries to a marvelously fine fruit that he produced from cross breeding of seedlings and choice varieties. Charles F. Gardner of Iowa experimented many years before producing this new strain of summer and fall bearing fruit, but feels that his time and trouble finally were richly rewarded. The plant is strong and vigorous with leaves of a bright, bluish-green tinge that the originator discovered was resistant to heat and rust. It forms root systems that grow deeply into the ground and are thus able to obtain moisture even during extended periods of extreme dryness. The berries have a distinctive flavor and fragrance, mindful of the wild sweet strawberry while they grow to very large size. There is a sweetness to the fruit that makes it possible to enjoy shortcake without spending much money for sugar.

From rod square beds of Number 999 plants set 18 inches apart in the row and rows 20 inches apart there have been grown and picked from 122 to 277 pints of berries the same season that the plants were set. It is just as natural for these plants to grow and fruit all summer and fall as it is for the standard varieties not to do so. The plants are set and cared for the same as the ordinary spring varieties except that you start picking berries in July from spring set beds instead of waiting until the next year. For the largest yield of berries, the hill system of planting is recommended, particularly if the ground is limited in size. For the first six weeks after planting all blossoms should be picked off as well as all runners as they appear. This causes the mother plant to throw up new crowns, which means more fruit stems and more and more berries.

An incident in our experience of the last season gave proof of the hardiness of Number 999. On the night of October 20th the ground was frozen to the depth of a half-inch. Ripe berries that were unprotected by the leaves were made worthless, but much to our surprise berries that were green at the time and protected by the leaves ripened as usual.



Experimental Plot of Everbearing Strawberries on the B. and H. Farms

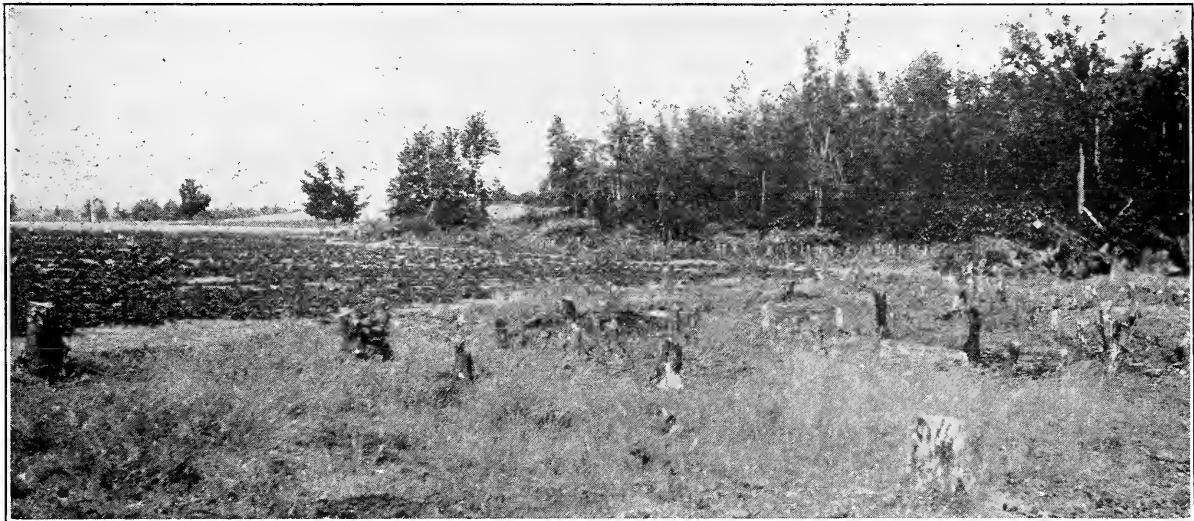
✓ Progressive P ROGRESSIVE Stamineate, or Perfect

Everbearing strawberry plants produce phenomenal crops of medium large

berries of a beautiful red color, both inside and outside and of an exquisite flavor. Fruit is fine for your table as well as for canning and preserving. B. & H. Progressive strawberry plants are vigorous and heavily rooted, with tall, spreading foliage. B. & H. Progressive strawberries are among the first to ripen in the spring and the last to be picked in the fall. Practically all fruit is brought to maturity on our plants, which are able to resist drought to a very great degree. It is recommended for planting with any pistillate variety as it is strongly stamineate. The Progressive has been recommended by one of the Government publications as one of the most resistant of strawberry plants to leaf spot trouble and as one of the hardiest plants grown. When planted in spring, Progressive plants yield fruit in the summer and fall of the same year, then produce a heavy crop the following year beginning to bear fruit about a week ahead of standard or June bearing varieties.

Progressive strawberry plants are especially adapted to intensive culture on rich soil. They have not been found adapted to all sections of the South. Those of our customers in the South are advised against too heavy plantings without first experimenting on a small scale or learning what success others may have had in their vicinity. We don't want anybody to put money into plants where the chances are against them. It is best to choose varieties that you know will grow. Anywhere that everbearers will grow you can get best results from B. & H. Progressives.

First orders seldom give a profit above all expenditures. We must win and hold a customer without so much costly chasing after him. When you know B. and H. plants you do the chasing that you may be sure to get reliable plants.



Clearing New Hardwood Lands for B. and H. Strawberry Plants

The Best of the Standard Varieties

Aroma

Late

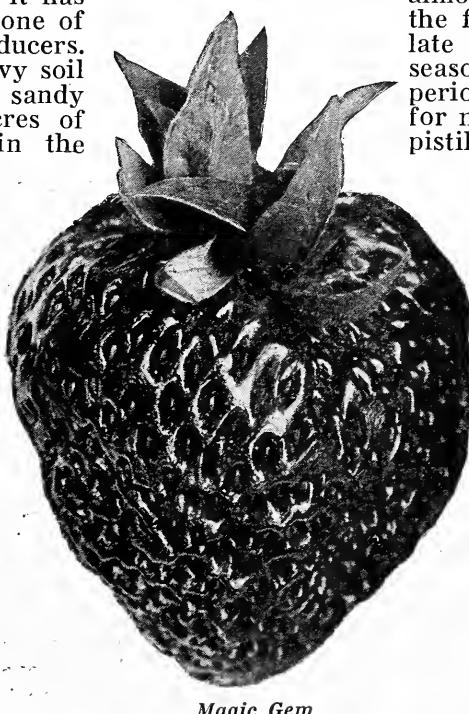
*Staminate, or Perfect
Flowering*

flavor that suggested the name AROMA. The berries are a bright, glossy red, or bright crimson on the surface, with flesh a lighter red. In shape the berries are smooth and conical. The plants have a habit of growing low and spreading so that a way is opened for the sunlight to reach the crowns and they are heavy producers of fruit. The Aroma is said to have been originated in Kansas more than thirty years ago and it has gained wide popularity as one of the most dependable of producers. It does finely in fairly heavy soil as well as in light and sandy ground. Thousands of acres of this variety are grown in the southern states. Berries from the Aroma keep so well that one of the U. S. Government publications classes this as "one of the best shipping varieties of the country." We think the Aroma one of the best late varieties and if we were selecting for our own use we would plant Aroma and then more Aroma. There is so great a demand for them that we advise everybody to send their orders early. See photograph of properly packed box of Aroma berries on page 4.

THE Aroma grown by Burmeister & Hartung produces berries that are very firm, of high quality and of a rich aromatic

Magic Gem
Medium Late
*Staminate, or Perfect
Flowering*

MAGIC GEM is a wonderful producer of large, deep, rich red berries that are excellent for canning or for shipping to market. Seeds are deeply imbedded in the berries and attract attention while well formed calyxes remain fresh and bright for a long time and make it desirable when packed. Magic Gem is a strong vigorous grower with leaves and stems very thick and tough, withstanding all extreme weather conditions. It has the desirable faculty of maturing all its fruit, so that the last picking is almost as large and attractive as the first. It is a strong medium late or mid-season, its blooming season extending over such a long period that it is successfully used for mating any except very early pistillate varieties. Magic Gem was originated in Idaho and plants grown in Northern Michigan soil by Burmeister & Hartung have proved valuable to commercial growers in all parts of the United States.



Proof of the quality of B. & H. plants is found in the fact that our new acreage of planting is doubled each year.

**B. & H. Plants
Please Others
and Will
Please You**

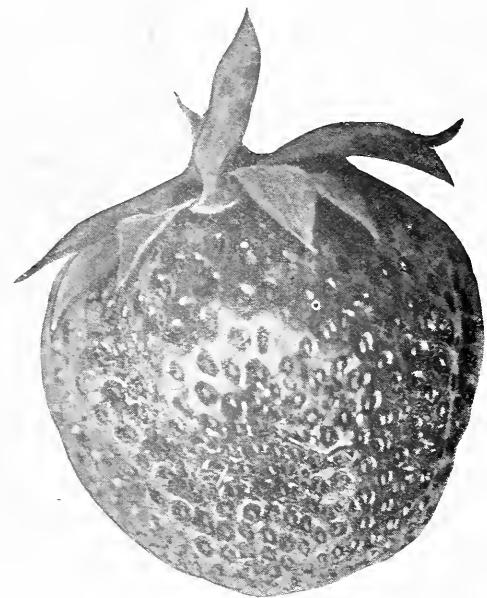
Howard

*Early
Stamineate, or Perfect
Flowering*

HOWARD No. 17 is a berry of so many fine qualities that enthusiasts can speak of it in only the highest terms of praise. It is a large, handsome and highly flavored berry, that is produced in very heavy quantities on plants that are vigorous, with perfect foliage. The berries generally are among the largest grown, they are never misshapen and they maintain their size and quality during a long season. As they bear early they can be counted upon to get to market when prices are high and they stand up well when shipped to distant markets. Plants appear to be immune from disease and after producing a heavy crop the foliage seems as green, healthy and luxuriant as at the beginning of the season. Howard No. 17 was introduced by C. E. Chapman of Connecticut and originated by A. B. Howard & Son of Massachusetts. It had been grown by a little coterie of farmers who refused to sell any plants for some years before Mr. Chapman obtained the nucleus of the present supply through the Connecticut Agricultural College. The Connecticut college in 1918 reported the Howard No. 17 the best variety of strawberry tested by it in a period of ten years. Crops of 15,000 quarts per acre are reported and the berries are of a rich, glossy red and are of a quality difficult to improve upon. We may safely say that it is a strawberry without a fault for either home or market.

B. & H.
PREMIER
Plants, Grown
on
New Ground
are of
Highest Quality

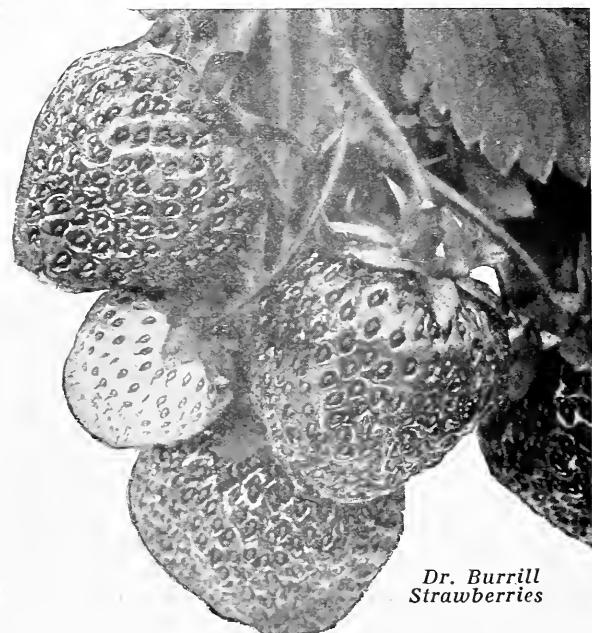
*See description
and colored cut
on inside front
cover*

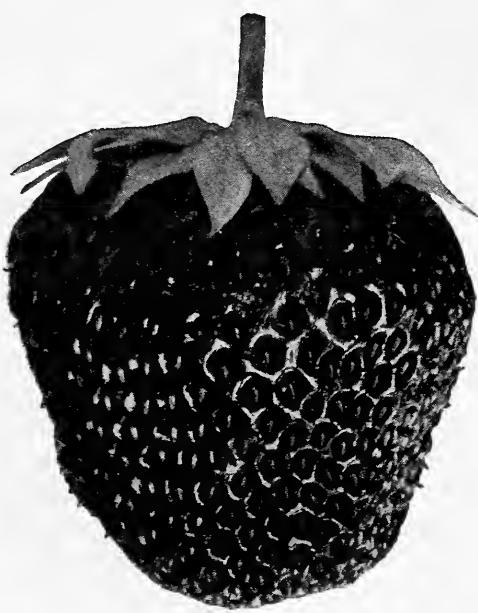


Howard No. 17

Dr. Burrill
*Medium Early
Stamineate, or Perfect
Flowering*

DR. BURRILL plants grown on the B. & H. farms are heavy producers of fruit that is delicious and beautifully formed. The surface of the berry is a deep, glossy red only a little lighter in color than the Senator Dunlap. The meat is solid and rich. Its long and heavy root system makes it a splendid drouth resister. The foliage is large and of a dark green, having a tough tissue that insures freedom from leaf spots. It is a good plant maker, always making enough plants for the hedge or matted row system. Its blossoms are large, hardy and well developed and very rich in pollen; blooms over a long season, making it an ideal pollener for pistillate varieties. Commences to ripen early and extends over a long season.

Dr. Burrill
Strawberries



Joe Johnson

Joe Johnson FRUIT large roundish-conical, even in size and shape and holds its size well until the last picking. Dark glossy red, firm and of excellent quality, adapted to practically all conditions of soil and climate. A splendid producer. A good pollinator for the late imperfect blossoming varieties. Also known as the Big Joe.

Senator Dunlap SENATOR Dunlap has been one of the most popular of strawberries for many years both for table use and for canning.

Berries are dark red with glossy finish shading to deep scarlet on under side and the fruiting season is unusually long. Its foliage is healthy in the north but susceptible to leaf spot in southern states. Very hardy and drouth resistant. Too well known to need description.

Brandywine DEEPLY rooted plants of Brandywine endure dry weather better than some other sorts. The fruit is deep red, of distinctive flavor and firm flesh. Plants make runners freely and do well on fairly heavy soil. Quality of fruit praised in government report, which shows foliage susceptible to leaf spot in some eastern states. Brandywine originated in Pennsylvania in 1889.

Heritage

Late
Staminate, or Perfect
Flowering

PLANTS are very large with attractive light green leaves, one of the prettiest and largest berries we grow. They are good plant makers, deep, heavy-rooted and hardy. A variety that is gaining in favor in all berry sections. The fruit is extra large, irregular in shape, firm and of good quality. A good variety for shipping or hauling to markets, also a fine garden berry. The berry has a peculiar color all its own, spoken of as a dark shining crimson with a heavy green calyx, making it very attractive. The Heritage is a great yielder and continues very late, yielding a large crop of berries. A good money maker. Be sure and order early as we never fail to sell out this wonderful variety. Illustration on page 7.

Big Late

Late
Pistillate, or Imperfect Variety

BRIGHT red glossy berries grow upon the plants of the Big Late strawberry and they have a fine flavor and aroma that is difficult to describe. It is unequalled for shipping as the berries keep in excellent condition for several days after picking. It is of great size and the plants are very prolific. The foliage grows tall and spreading. This is one of the latest strawberries to ripen. As the blossoms are imperfect the plants should be planted with a good perfect flowering variety.

**GROW
GIBSON
for Big Money**

**One of heaviest
yielding mid-
season sorts**

**See description
and colored cut
inside back
cover**



Northern Grown Heavy White Rooted Plants

High Yields

Our plants are grown under ideal conditions and develop a wonderful heavy, white, root system. We do not know what black roots are on our farms, but we do know that a black root on a strawberry plant is a dead root. A black root is absolutely worthless to the plant. We guarantee our plants to be absolutely free from black roots. Every root on our plants is a worker, stored full of pep and vitality. This is one of the big secrets of the wonderful success our plants have made wherever they have been tried.

A strawberry plant stores up a large amount of its food in its root system. The larger the root system, the easier it is for the plants to produce large crops of fruit and to withstand dry spells.

B. & H. Strawberry Plants Best That Grow

WE ARE listing only the best there is in strawberry plants. We grow our own plants and ship only those with white root systems. Black roots are dead roots. B. & H. plants have heavy white roots.

Accompanying the description of each variety in this catalog you will find the classification STAMINATE, or PISTILLATE. Remember that any staminate variety can be planted by itself. Plants with staminate flowers, having both stamens and pistils, are classed as staminate, male, bi-sexual, or perfect. Flowers of pistillate varieties lack stamens and are classed as imperfect. If you plant imperfect or pistillate varieties, staminate varieties must be planted near them in order to furnish them with an aid to pollination or no fruit will set.



Let Strawberries Pay the Expense of Developing Your Young Orchards. They Will Do It

Why B. & H. Plants Are Best

STRAWBERRIES grow in many parts of the world but produce fruit of finest flavor and best quality in northern latitudes. This is a fact that is officially shown in United States government publications. The section in which Burmeister & Hartung plants are grown is especially favored by natural adaptation to production of highest quality strawberry plants. These plants have won an enviable reputation by the exquisite flavor of their fruit and they

have made friends so fast that plantings have been more than doubled each year in order to meet demands for new plants.

In our shipping of plants we never ship mother plants, of which there may be 10,000 or more in an acre. Some nurseries may include them but they will never give satisfactory results to customers. They are black rooted and our new northern grown plants are white rooted. They can be depended upon to produce heavy crops of high quality fruit.

Prices Paid to Strawberry Growers

In this table is given the average jobbing prices per quart in several markets for the months of March, April and May, 1921, as shown in the Year Book of the U. S. Department of Agriculture:

	March	April	May		March	April	May
Chicago	\$0.31	\$0.37	\$0.24	Minneapolis	\$0.37	\$0.41	\$0.31
New York .....	.47	.41	.27	Cincinnati .....	.33	.27	.23
St. Paul .....	.38	.44	.28	Kansas City .....	.33	.36	.23
St. Louis .....	.31	.33	.23	Pittsburgh .....	.34	.34	.26
Philadelphia .....	.33	.34	.23	Washington .....	.50	.35	.22

The Washington prices were for sales direct to retailers. March quotations were for the last half of the month.

You can make from \$500 to \$1000 per acre growing Strawberries from Burmeister & Hartung New Ground Plants. See page 22 for prices on any quantity of all varieties of plants and make out your order on the enclosed order sheet. Make out your order today. Berries from Burmeister & Hartung plants always sell.

Praise from Delighted Customers

MORE THAN a half million B. & H. strawberry plants were bought by one big concern last spring most of them for delivery to customers of the concern which has a large nursery business. The secretary of the company wrote to us that the head of the house had noted the fine showing made in their trial grounds by B. & H. plants. "Up to this time," the letter said, "your plants are showing up rather better than the plants we have been growing ourselves from year to year. I believe you have a splendid stock and I am sure that our hundreds of customers who have had your plants through us will be highly pleased."

Says every plant grew:

Fort Collins, Colo. Dec. 5, 1922. Burmeister & Hartung, Onekama, Mich.: Find \$10.00 inclosed for which send me about April 1, 1923, by Parcel Post, as many Gibson strawberry plants as it will pay for. Last spring the 250 plants that I ordered from you grew finely, every one of them, and were loaded with fine berries. Your everbearers beat them all, but they come in season when I am away from home.

BERT A. GUIETT.

Here is what one of our customers in Virginia wrote to us:

*Burmeister & Hartung,
Onekama, Mich.*

We want to thank you for the nice plants you sent us and for the way you packed them. Your plants arrived in much better condition than shipments from other firms. We take pleasure in complimenting you in the highest terms on your plants.

Belmont, N. Y.

*Burmeister & Hartung,
Onekama, Mich.*

I have received the strawberry plants ordered from you and they are fine.

OTTO BORCHERT

Here are words of cheer from other states:

*Burmeister & Hartung,
Onekama, Mich.*

Cedar Rapids, Iowa.

I was well pleased with the plants received from you. I received shipments from six growers this spring but yours were best of all.

ARTHUR DETWILER.

*Burmeister & Hartung,
Onekama, Mich.*

College View, Neb.

Plants ordered from you were received in good condition and were very nice.

C. H. REEDER.

Mishawaka, Ind.

*Burmeister & Hartung,
Onekama, Mich.*

Plants ordered from you arrived in fine shape.

FRED J. SYTZ

Syracuse, N. Y.

*Burmeister & Hartung,
Onekama, Mich.*

The strawberry plants came in good order and are fine. We will say a good word for B. & H. plants whenever we can.

MR. AND MRS. ALFRED C. HENDRICKS.

BANK OF ONEKAMA

HANS A. WENDEL & Co., Bankers.

HANS A. WENDEL, PRESIDENT

ONEKAMA, MICHIGAN,

HANS A. WENDEL, CASHIER

October 17th, 1922.

To whom it may concern:

Burmeister and Hartung have just passed another very successful year in their strawberry plant business. During the past spring when they were shipping many thousands of plants daily the writer watched these shipments with much interest and knows that only the very best plants were shipped.

We have read many letters of praise for their plants and we do not know of one dissatisfied buyer.

When you buy Burmeister and Hartung plants you can rest assured that you will be satisfied.

Yours respectfully,

Hans A. Wendel

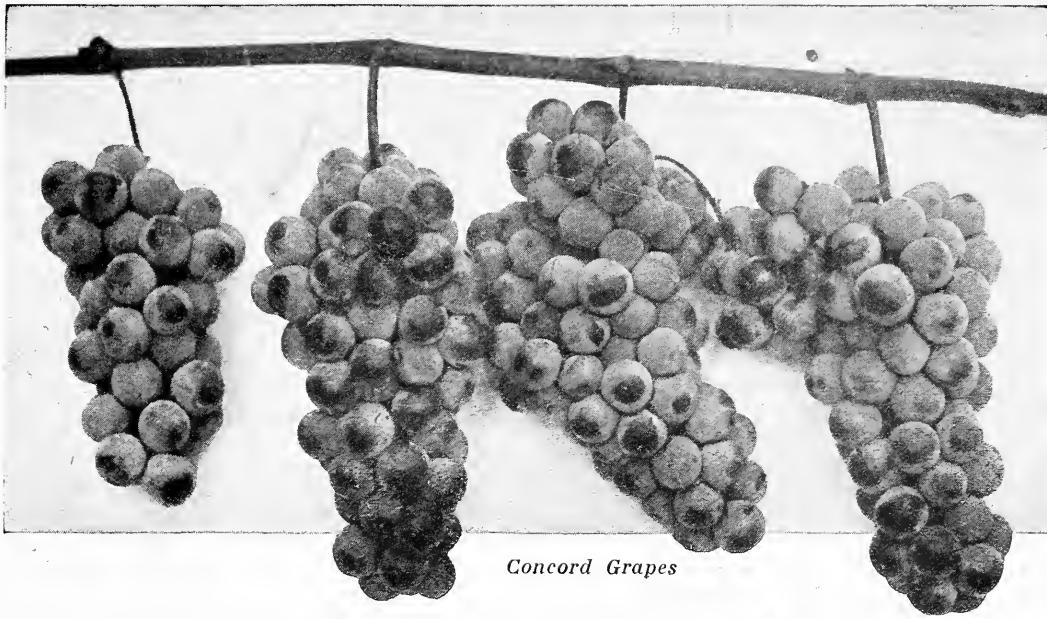
CASHIER.

HAW:TE

SATISFIED BUYERS

*of B. & H.
Highest Quality
New Ground
Plants*

*are our
BUSIEST BOOSTERS*



Grapes That Are Best Liked

GRAPES have long been in universal demand and have an unquestioned reputation for their health giving qualities. General use in hospitals of the United States of unfermented grape juice for medicinal purposes has helped to give a ready market to all grapes grown. Grape juice is easily made in the home and provides refreshing beverage that is easily kept in the house for any occasion and provides both health and comfort. Grapes grow well in nearly all sections of the United States. The soil should be well drained, the vines given liberal applications of well rotted manure each year, with a dressing of slaked lime every few years. If present indications may be taken as a guide those who start vineyards ought to reap financial harvests for some years to come. With good care and cultivation it is not uncommon to have grapevines yield as much as eight tons of grapes to the acre. We are listing only the most valuable varieties.

CONCORD—Black, luscious fruit; vine hardy, healthy and very productive. This is the most popular of grapes. Berries are large and covered with rich bloom, skin tender, but sufficiently firm to carry well to distant markets. See illustration on back cover of this catalog.

MOORE'S EARLY—This is a very popular black grape that begins to ripen two or three weeks earlier than Concord. Berries are large in large bunches which ripen evenly and have a heavy bloom. Beauty and quality with earliness make this very desirable. It is hardy, productive and a good grower and always brings a good price.

WORDEN—Seedling of the Concord that ripens large black grapes ten days earlier than the Concord. It is not as good a keeper and does not ship so well to distant markets but because of fine appearance and flavor brings good prices at home markets.

NIAGARA—Leading white grape for home or market. Bunches are very large, handsome and compact. Berries are tender and sweet with a tough skin that does not crack and carries them well. The flavor has won for it great popularity. Niagara is a heavy cropper.

DELAWARE—Beautiful pink berries of unsurpassed delicate flavor. Bunches are small and compact. Flesh is juicy and refreshing and of finest quality for table. It ripens at the same time as Concord.

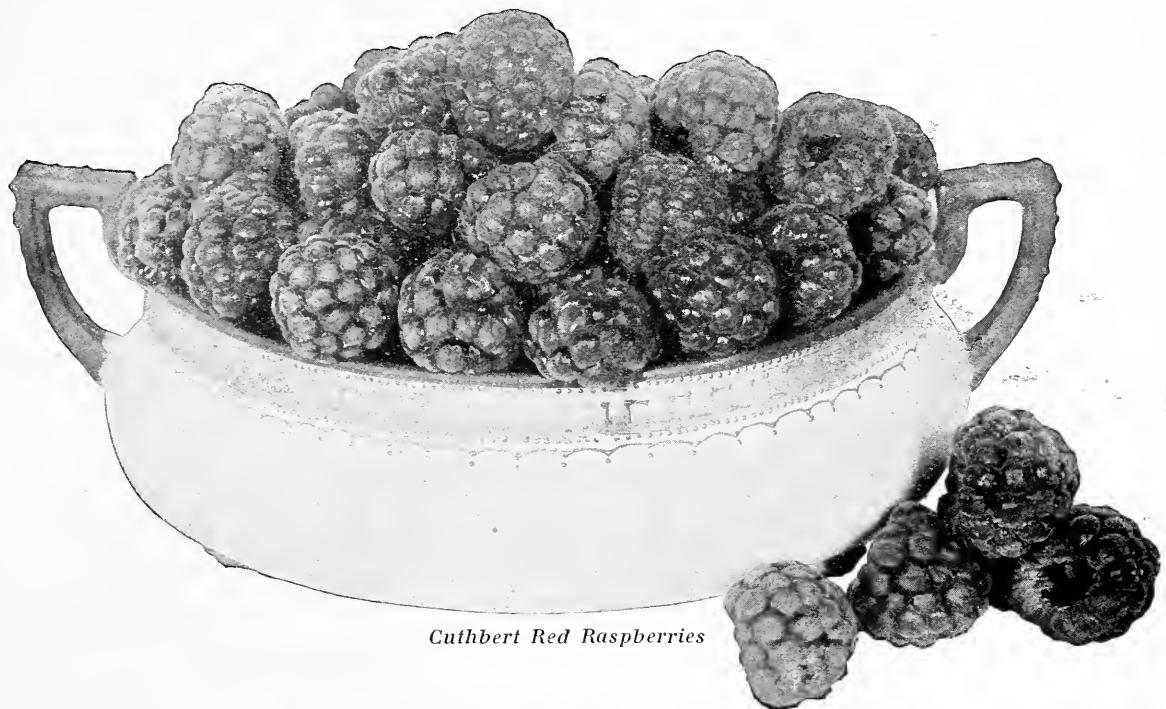
CAMPBELL'S EARLY—Always listed among the best black grapes. Vines grow strongly and fruit is of fine quality that keeps well.

Grape vines will do well on light sand or clay soil where it is difficult to raise crops of grain or some other kinds of fruit. For field culture grape vines should be planted at least 8 feet apart each way. Conards are such vigorous growers that the rows should be 10 feet apart and the vines 8 feet in the row.

**Grape Growers
in Michigan re-
ceived \$60 to
\$100 a ton last
season**



Moore's Early Grapes



Big Profits in Red Raspberries

NEXT to the strawberry we think the red raspberry one of the finest of fruits. It is comparatively easy to grow and it is surprising what fine results are frequently obtained. One grower in the vicinity of Onekama harvested this last season more than 1000 crates of 24 pints each from a three acre plantation. Raspberries have made big profits in recent years.

As a rule the best time for planting raspberries is in the spring. Commercial growers plant various distances apart. In planting the hill system the distance usually is 6 by 6 or 7 by 7 feet apart. For continuous rows of matted vines the distances usually are 3 or 4 feet apart in the row and the rows 8 or 9 feet apart. Large plantings should have plenty of room for cultivation. The field can be more easily kept clean if rows permit horse cultivation both ways. Elsewhere in this catalog you will find a table giving number of plants required per acre at various distances.

Careful cultivation is sure to be rewarded in raspberry growing and thorough spraying is essential. Rich soil is not necessary but the results are quickly noticeable when raspberry fields are fertilized.

CUTHBERT—The Cuthbert is without doubt the best late variety of red raspberry. It is often called Queen of the Market which name is very appropriate. Cuthbert is one of the heaviest yielding and finest flavored of all red raspberries. It is a wonderful shipper. In the vicinity of Onekama one grower has a record of over 1000 crates of 24 pints each from a three acre plantation.

KING—The King is a wonderful early red raspberry. The berries are very large, bright red, easily picked. It is very hardy and a strong grower. A money maker.

MILLER—This is a medium early red raspberry, very hardy and of stocky growth. The berries are very firm, which makes them excellent shippers.

Greatest of Black Raspberries

CUMBERLAND—This is the heaviest yielding and most profitable of black raspberries. Plants are vigorous, growing luxuriously wherever planted and are exceedingly productive of berries that are not equalled in size or quality by any variety. The fruit ripens medium early.

Things that go to make B. & H. plants of superior quality are: Precise selection of varieties in planting, digging and shipping, thorough fertilization and cultivation of the soil, an climatic conditions due to geographic position.



Section of the B. and H. Gladiolus Plantation

Gladness in Gladiolus Blossoms

WETHER you give most of your time to growing grain or cattle, pigs, potatoes, small fruits or the big luscious apples that help to put Michigan in the front rank it is safe to say that you love flowers. You may be a bit modest about admitting the fact, just as some fellows find it hard to tell a girl she is the nicest thing in the world and every fellow knows down deep in his heart all about some girl that is the nicest thing in the world and every fellow knows too that flowers are beautiful things. Every home seems just a whole lot nicer when the nicest girl is planted in it and when old fashioned flowers are in the window or some corner of the garden.

Gladiolus flowers are so easily grown that you can just as well as not have them. When your grandmother grew them and you were a little toddler you called them "glad old ladies" just because you didn't get the name right and they might as well have been called glad ladys for they ever have made glad the hearts of ladies young and old. Many of us have got into the way of calling them "glads" because it is so much easier and then too we get away from the question that bothers so many of pronunciation. Glad-I-olus, says the modern authority while the old way was Gladi-O-lus and old ways cling to some of us. But never worry about the name. The flower is the thing.

Big books have been printed telling about the wonderful work of growers in developing gladioli of today from the sword lily of South Africa. It is an interesting subject but too long a story to explain here. Bulbs that produce flowers of more exquisite charm than was known a generation ago are obtained by scientific efforts of experts. The modern degree of perfection in gladiolus flowers has been obtained through painstaking crossing and re-crossing of several species of distinct types.



Closer View of One of the Blooms

We have inquiries from many of our friends who are looking for profitable side lines. After many years of experimenting we have found the growing of gladioli a side line that is profitable as well as pleasant.

Whether your side line of growing gladioli is made large or small it will afford you great pleasure in many ways. One of the ways of making money with them is in grow-

ing them for cut flowers. Frequently you can find ready markets at your roadside to passers-by in autos. Blossoms keep well, often for two weeks after they are cut. The bulbs are good for several years. Gladioli are easy to grow and are free from disease. They can be planted to advantage on ground where you turn under old strawberry beds if you wish.

Varieties in Greatest Demand

ALICE TIPLADY—A grand large primulinus of most beautiful orange saffron. Very choice. Each 20c; dozen \$2.00.

AMERICA—The popular soft lavender pink gladiolus. Each 5c; dozen 50c; 100 \$3.50.

AUTUMN QUEEN—Color, cream yellow, upper petals suffused with lovely pink. Red blotch in throat. Fine for late planting. Each 15c; dozen \$1.50; 100 \$7.50.

EVELYN KIRTLAND—Rosy pink, darker pink at edges, fading to shell pink in throat, with scarlet blotches in lower petals. Each 15c; dozen \$1.50; 100 \$12.00.

GRETCHEN ZANG—A pleasing shade of pink blending to scarlet on lower petals. Each 10c; dozen \$1.00; 100 \$7.50.

HALLEY—Delicate salmon pink. Large creamy blotch. Early. Each 5c; dozen 50c; 100 \$3.50.

HERADA—Large blossoms of beautiful mauve. Very striking. Each 15c; dozen \$1.50. 100 \$12.00.

LILY WHITE—Pure white. Very fine early variety. A good florist's flower. Each 15c; dozen \$1.50.

L'IMMACULEE—Pure white on long spike. Very fine. Each 15c; dozen \$1.50; 100 \$12.00.

LOVELINESS—Very large and strong of growth. Tall handsome spikes of light cream colored flowers. Each 15c; dozen \$1.50.

MR. MARK—The best real blue. Light blue with darker blotch. From Holland. Each 15c; dozen \$1.50.

MRS. FRANCIS KING—Very large flame red flowers on a long spike. One of the most vividly colored of gladioli. Each 5c; dozen 50c.

MRS. FRANK PENDLETON—One of the very

finest. Light pink (sometimes nearly white) with a great blotch of richest carmine red in the throat. Wide open large flower. Strong grower. Has been awarded many prizes. Each 10c; dozen \$1.00. 100 \$7.50.

PANAMA—Magnificent large pink. Blooms wide open and waxlike. A favorite with all. Each 10; dozen \$1.00; 100 \$7.50.

PEACE—A grand white flower. Very large with delicate lilac feathering on lower petals. Tall. Strong grower. Each 10c; dozen \$1.00; 100 \$7.50.

PRINCE OF WALES—The very choicest of all salmon varieties and one of the best of all gladioli. Early as well as beautiful. A winner. Each 15c; dozen \$1.50; 100 \$12.00.

SCHWABEN—New variety of great beauty. Clear canary yellow shading to sulphur with a touch of red in throat. One of the best yellows. Each 10c; dozen \$1.00; 100 \$7.50.

WAR—Deep brilliant red. Strong grower with large wide open flowers. Sold a few years ago at \$1.00 per bulb. Each 10c; dozen \$1.00.

MRS. DR. NORTON—La France pink with canary throat. Very popular. Each 35c.

ANNA EBERIUS—Deep velvety purple; throat deeper shade. Large flowers on tall spike. Don't fail to order this one. Each 25c.

CRIMSON GLOW—Very fine crimson. Large flowers. The best and largest red. Each 25c.

LOUISE—Very large well opened flower measuring five to six inches in diameter. Color fine bright blue lavender with wine colored blotch. Strong rank grower. Each 30c.

FLORA—Almost pure yellow. Large spike with many open blooms. Each 30c.

SELECT MIXTURE—We will send a fine mixture, our selection, at 50 cents a dozen. We can supply most of the varieties in our list in 1000 lots or more at reduced prices.

All the prices given are for full blooming size stock. Remittance must accompany all orders. No orders accepted for less than 50 cents. Prices include postage to any part of the U.S.

How to Plant and Care for Gladioli

Each gladiolus bulb will give full measure of profit or pleasure to you with less trouble than almost anything you can plant. For early flowering plant as soon as the ground is ready for early garden making and danger of freezing is past. For succession of flowers continue to plant at two week intervals until late in June. Plant 4 to 5 inches deep; 4 to 6 inches apart in the row.

Ground will be in better shape if well covered with manure late in the fall preceding planting time. At planting time, which is always in the spring, use well rotted manure and avoid getting the bulb in close contact with the manure. If soil is heavy it should be plowed or spaded deep and well pulverized and packed, but avoid working it when it is too wet.

When you cut flower spikes leave four or five leaves on the plant if you want full sized bulbs to form for the next year. In hot weather spikes should be cut in the morning just as the first flowers open on the spike you are cutting and left to bloom in the house.

Dig bulbs in the fall before they are too ripe, dry them in air and sunshine. Then store them in a cool, dry cellar. Keep temperature as near forty degrees as possible.

B. & H. Garden Collections

For the benefit of our customers who have only small plots of ground to spare for strawberry patches for their families we are offering the following Garden Collections:

Garden Collection No. 1

50 PREMIER. Best early strawberry	\$.70	SPECIAL PRICE
50 GIBSON. Best midseason variety .....	.65	
50 DR. BURRILL. Million Dollar strawberry .....	.60	
50 AROMA. Best late berry in its class .....	.65	
50 CHAMPION. New Everbearer without a fault	1.65	
REGULAR CATALOG PRICE	<u>\$4.25</u>	

**250 Plants
\$3.50**

You will find this collection can be nicely planted on a piece of ground 25 feet square. Best results can be obtained in the hill system with rows 2 feet apart and plants 15 inches apart in the row. This patch will provide plenty of fruit for a small family as berries can be picked from May to November, according to your location. You may safely count upon a surplus also for canning. If you lack experience in growing strawberries you will find definite instructions in this catalog and we are always ready to give any additional advice to those who ask us for it.

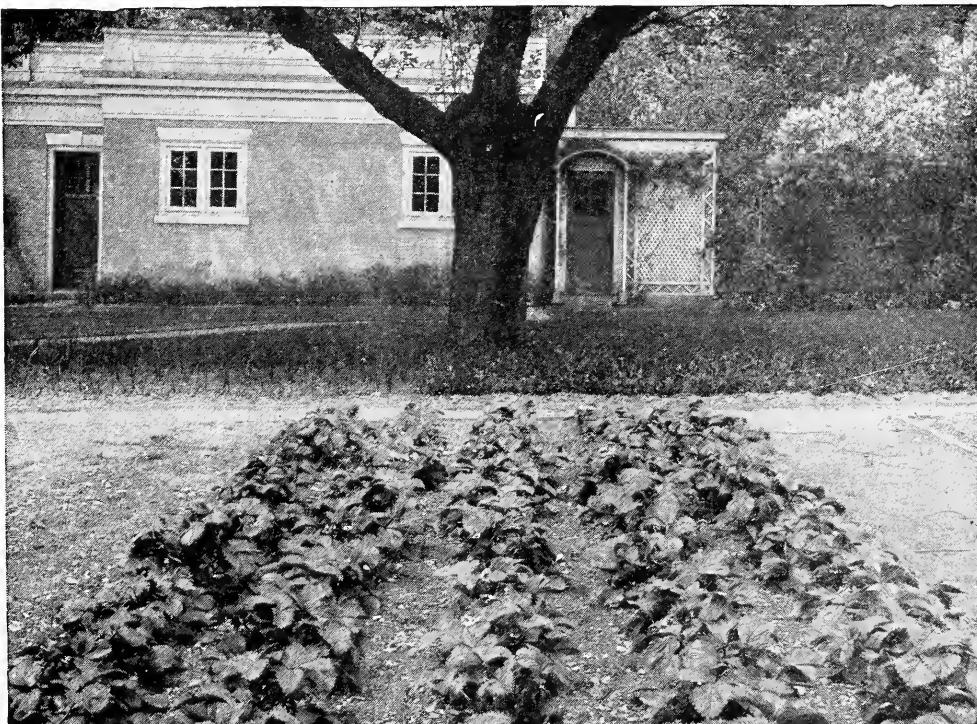
Garden Collection No. 2

100 PREMIER	\$1.25	SPECIAL PRICE
100 GIBSON	1.15	
100 DR. BURRILL	1.00	
100 AROMA	1.15	
100 CHAMPION	2.75	
REGULAR CATALOG PRICE	<u>\$7.30</u>	

**500 Plants
\$6.50**

This collection is twice as large as collection No. 1, will plant twice as large a patch and will provide that much larger a crop of luscious fruit. We have selected the varieties with the object of providing a collection that will fill your wants during the entire fruiting season. Every variety named here is thoroughly reliable. By making up many of these collections to fill orders from many of our customers we are able to give you the advantage of the reduced price.

Should your order reach us late and our supply of some sorts be exhausted we will complete your collection by substitution of other plants of equal value. Send your order early and be more certain of having it booked before any of the varieties run short.



INSTRUCTIONS TO PURCHASERS

Read over very carefully before making out your order. Use the Order Sheet enclosed and sign your name very plainly giving Post Office, County and State.

OUR LOCATION. We are located in the Western Michigan Fruit Belt in Manistee County about three miles from the tempered waters of Lake Michigan, and 200 miles north of Chicago.

OUR TERMS are cash with order, or will book early orders if one-fourth of the amount is remitted on orders sent us before March 15th, and balance to be paid by April 1st or we will allow you 5% discount on all cash orders sent before March 15th. Usual terms to the trade. Remit by draft, express or post office money orders, registered letter or your check will do.

TELEPHONE. Long distance telephone in our office.

AMOUNT OF MONEY TO SEND FOR POSTAGE

We can ship by Parcel Post, and within the nearer Parcel Post Zones it is the cheaper method. Within the first three zones covering 300 miles the limit of weight is seventy pounds, while in all other zones the limit is fifty pounds. As the weights of plants vary and the rate of postage is different in each zone, we have made out a plan which is of advantage to our customers and makes it easy for them to make remittances for postage by using the flat rate listed below. After making out your order, if you prefer to have your plants shipped by Parcel Post instead of by express, look for the group your State is in, then you can easily make your postage remittances per each one hundred plants.

THE RATE PER 100 PLANTS TO THE DIFFERENT STATES IS AS FOLLOWS:

GROUP NO. 1—Michigan, Wisconsin, Illinois, Indiana, and Ohio on Strawberry Plants, \$0.15; Red Raspberry Plants, \$0.20; Black Raspberry and Grape Plants, \$0.25 per 100 plants.

GROUP NO. 2—Iowa, Kentucky, Minnesota, Missouri, New York, Pennsylvania, Tennessee, and West Virginia on Strawberry Plants, \$0.20; Red Raspberries, \$0.25; Black Raspberry and Grape Plants, \$0.30 per 100 plants.

GROUP NO. 3—Alabama, Arkansas, Connecticut, Delaware, District of Columbia, Florida, Georgia, Kansas, Louisiana, Maine, Maryland, Massachusetts, Mississippi, Nebraska, New Hampshire, New Jersey, North Carolina, North Dakota, Oklahoma, Rhode Island, South Carolina, South Dakota, Virginia, Vermont, Strawberry Plants, \$0.25; Red Raspberries, \$0.30; Black Raspberry and Grape Plants, \$0.35 per 100 plants.

GROUP NO. 4—Colorado, Idaho, Montana, New Mexico, Texas, Utah, Wyoming on Strawberries, \$0.35; Red Raspberries, \$0.40; Black Raspberry and Grape Plants, \$0.45 per 100 plants.

GROUP NO. 5—Arizona, California, Nevada, Oregon, Washington and Canada on Strawberries, \$0.45; Red Raspberries, \$0.55; Black Raspberries and Grape Plants, \$0.65 per 100 plants.

Where our customers live on R. F. D. routes with Parcel Post delivered at their doors, it is so much more convenient than having to go perhaps several miles to the express office, that to accommodate such we are willing to send in the manner described above.

However, we frankly admit that considering the perishable nature of live plants, we believe that express shipment is the safest and cheapest in the end, although it may cost a little more. We much prefer express shipments.

BY EXPRESS. This is the safest way to ship live plants, as it makes fast time with the least liability of delay.

At present all express companies have united under one management, covering the whole United States. However, plants go as second class, and at twenty-five per cent less than General Merchandise rates.

For large orders, or for long distance, express shipment is cheapest, and we think best.

FIVE PER CENT DISCOUNT ON EARLY ORDERS accompanied by cash in full will be allowed as a special inducement for you to order early, thereby relieving our busy season. On all orders received before March 15th you save 5%. Order now; you can't make 5% any easier.

OUR PACKING is done in the *best possible* manner and under our personal care. We use light, strong crates or baskets with plenty of moss for packing strawberry plants, making no charge for the work or package. Our long experience in this line gives us a decided advantage in the matter of safe packing. We also have experienced help who have worked with us for several years. Of course, we do not claim infallibility and are always ready to make reparation where at fault.

ORDER BLANK. Use the order blank attached when ordering, being careful to write your name *plainly*, giving Post Office, County and State, and do this every time you write. Also keep a *copy* of your order yourself. Be particular to say how goods are to be sent, whether by mail or express. All orders are acknowledged immediately upon receipt. If you do not receive an acknowledgement in a reasonable time, write again.

WHEN TO ORDER. Early, by all means. The rule generally is "First come, first served," also the early orders find full stock, while later some varieties are liable to be exhausted.

Our customers will please remember that the time for filling orders is short, and it would facilitate our work greatly if orders were sent before the rush.

SUBSTITUTION. In ordering please state whether we shall substitute some other variety in case the kind ordered is exhausted. If not forbidden, we claim the right to substitute something of equal value but always label true to name. We always aim to substitute with a variety similar in quality and season, and always something listed at equal or higher rate.

GUARANTEE AND CONDITIONS OF SALE. While we take great pains to have stock true to name, and hold ourselves ready upon proper proof to refund money or replace any that proves untrue, it is mutually agreed that we shall not be liable for a greater sum than the amounts paid for such stock.

Every order received for plants named in this catalog will be received and executed on the above conditions only and with the distinct understanding and agreement on the part of the purchaser that we shall in no case be liable for a greater amount than the sum originally paid to us for the stock in question.

REFERENCES. We refer you to the Bank of Onekama, of Onekama. Parties writing to the above please enclose stamped envelope for reply.

WEIGHT OF PLANTS. Strawberry plants will weigh approximately 4 pounds per 100; red raspberry plants, 5 pounds per 100; black raspberry plants and grape vines, 6 pounds per 100.

Price List for 1923

These prices are for plants packed and delivered to our Postoffice or Express Company here. Transportation charges to be paid by purchaser. You may select 500 or more of a variety at the thousand rate.

Strawberry Plants

Early Varieties

	25	50	75	100	150	200	250	300	350	400	450	1000
Premier	\$0.50	\$0.70	\$0.90	\$1.25	\$1.40	\$1.75	\$2.00	\$2.30	\$2.55	\$2.85	\$3.05	\$6.50
Howard No. 17	.50	.70	.90	1.25	1.50	1.85	2.15	2.50	2.80	3.10	3.30	7.00

Mid-season Varieties

✓ Dr. Burrill	\$0.40	\$0.60	\$0.80	\$1.00	\$1.25	\$1.50	\$1.70	\$1.90	\$2.10	\$2.30	\$2.40	\$5.00
✓ Senator Dunlap	.40	.60	.80	1.00	1.25	1.50	1.70	1.90	2.10	2.30	2.40	5.00
✓ Gibson	.40	.65	.90	1.15	1.30	1.60	1.85	2.10	2.30	2.60	2.80	6.00

Late Varieties

✓ Heritage	\$0.40	\$0.65	\$0.90	\$1.15	\$1.30	\$1.60	\$1.85	2.10	2.30	2.60	2.80	6.00
Aroma	.40	.65	.90	1.15	1.30	1.60	1.85	2.10	2.30	2.60	2.80	6.00
Brandywine	.40	.65	.90	1.15	1.30	1.60	1.85	2.10	2.30	2.60	2.80	6.00
Magic Gem	.50	.70	.90	1.25	1.50	1.85	2.15	2.50	2.80	3.10	3.30	7.00
Joe Johnson	.40	.65	.90	1.15	1.30	1.60	1.85	2.10	2.30	2.60	2.80	6.00
Big Late	.50	.70	.90	1.25	1.50	1.85	2.15	2.50	2.80	3.10	3.30	7.00

Everbearing Strawberries

✓ Progressive	\$0.75	\$1.20	\$1.60	\$2.00	\$2.75	\$3.50	\$4.00	4.50	5.25	6.00	6.50	14.00
Champion	1.00	1.65	2.20	2.75	3.90	5.10	6.00	7.00	7.75	8.50	9.25	20.00
999	1.50	2.40	3.20	4.00	5.50	7.00	8.50	10.00	11.25	12.50	13.75	30.00

Raspberries

✓ Cuthbert (Red)	\$1.00	\$1.65	\$2.20	\$2.75	\$3.90	\$5.10	\$6.00	\$7.00	\$7.75	\$8.50	\$9.25	\$20.00
King (Red)	1.00	1.65	2.20	2.75	3.90	5.10	6.00	7.00	7.75	8.50	9.25	20.00
Miller (Red)	1.00	1.65	2.20	2.75	3.90	5.10	6.00	7.00	7.75	8.50	9.25	20.00
Cumberland (Black)	1.00	1.65	2.20	2.75	3.90	5.10	6.00	7.00	7.75	8.50	9.25	20.00

Grape Vines

Select, Heavy Rooted

	Each	6	12	25	100
Concord	.15	.80	1.50	2.50	7.00
Moore's Early	.25	1.35	2.50	4.00	12.00
Worden	.25	1.35	2.50	4.00	12.50
Niagara	.25	1.35	2.50	4.00	12.50
Campbell's Early	.30	1.50	2.75	4.25	14.00
Delaware	.30	1.50	2.75	4.25	14.00

**When in doubt as
to Variety order
CONCORD
Grape Vines**

FIVE PER CENT DISCOUNT ALLOWED ON EARLY ORDERS

As a special inducement to have you send in your order early we will allow a cash discount of 5 per cent on all orders received before March 15th, accompanied by cash in full.

When you buy B. & H. plants you buy the best that grow and you can be sure that you will receive them in the best possible condition and of undoubted quality. Plants are freshly dug when shipped to you and are carefully labeled and packed to avoid mixing of varieties. We list only the most dependable of varieties. Remember we give an absolute guarantee that B. & H. plants are true to name and of finest quality. If you are not satisfied in every way when our plants reach you we want you to return them at once to us and we will refund your money. High quality plants always are best whether you are growing for pleasure or for profit.

Order No.
Date Rec'd
Amount, \$
Do Not Write in This Space

PLEASE USE THIS ORDER SHEET

Burmeister & Hartung
Onekama, Michigan

Amt. Enclosed

Date 1923

PLEASE SEND PLANTS NAMED BELOW TO:

Name Rural Route No.

Post Office Express Co.

County Ship by
How to Ship

State Ship About
When to Ship

Express Office

Shall We Substitute Some Other Variety If Out of the Kind Ordered?

No. of Plants	Variety	Price
	Howard No. 17 Strawberry Plants	
<input checked="" type="checkbox"/>	Premier " "	
<input checked="" type="checkbox"/>	Dr. Burrill " "	
<input checked="" type="checkbox"/>	Senator Dunlap " "	
<input checked="" type="checkbox"/>	Gibson " "	
<input checked="" type="checkbox"/>	Heritage " "	
<input checked="" type="checkbox"/>	Aroma " "	
<input checked="" type="checkbox"/>	Brandywine " "	
	Magic Gem " "	
	Joe Johnson " "	
	Big Late " "	
<input checked="" type="checkbox"/>	Progressive " "	
<input checked="" type="checkbox"/>	Champion " "	
	999 " "	
	Garden Collection No. 1 Strawberry Plants	
	Garden Collection No. 2 " "	
<input checked="" type="checkbox"/>	Cuthbert Red Raspberry Plants	
<input checked="" type="checkbox"/>	King " "	
	Miller " "	
	Cumberland Black Raspberry Plants	
<input checked="" type="checkbox"/>	Concord Grape Vines	
	Moore's Early Grape Vines	
<input checked="" type="checkbox"/>	Worden " "	
	Niagara " "	
<input checked="" type="checkbox"/>	Campbell's Early Grape Vines	
	Delaware " "	

ORDER SHEET—Continued

Remember the Five Big Money Makers

Premier (Early)

Dr. Burrill (Medium)

Progressive (Everbearing)

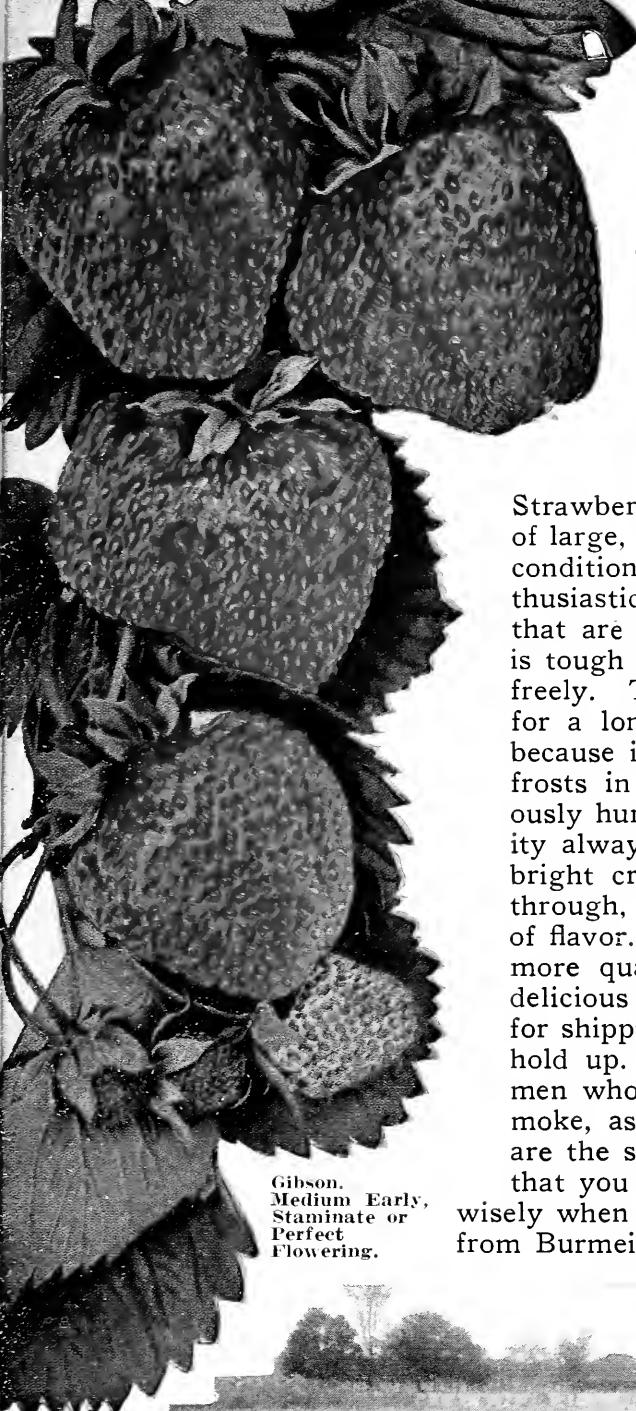
Gibson (Medium)

Aroma (Late)

These are the Big Sellers

Better Order Now!

If you know of berry growers who would appreciate our catalog and will write their addresses below we will be glad to send you some extra plants.



GIBSON

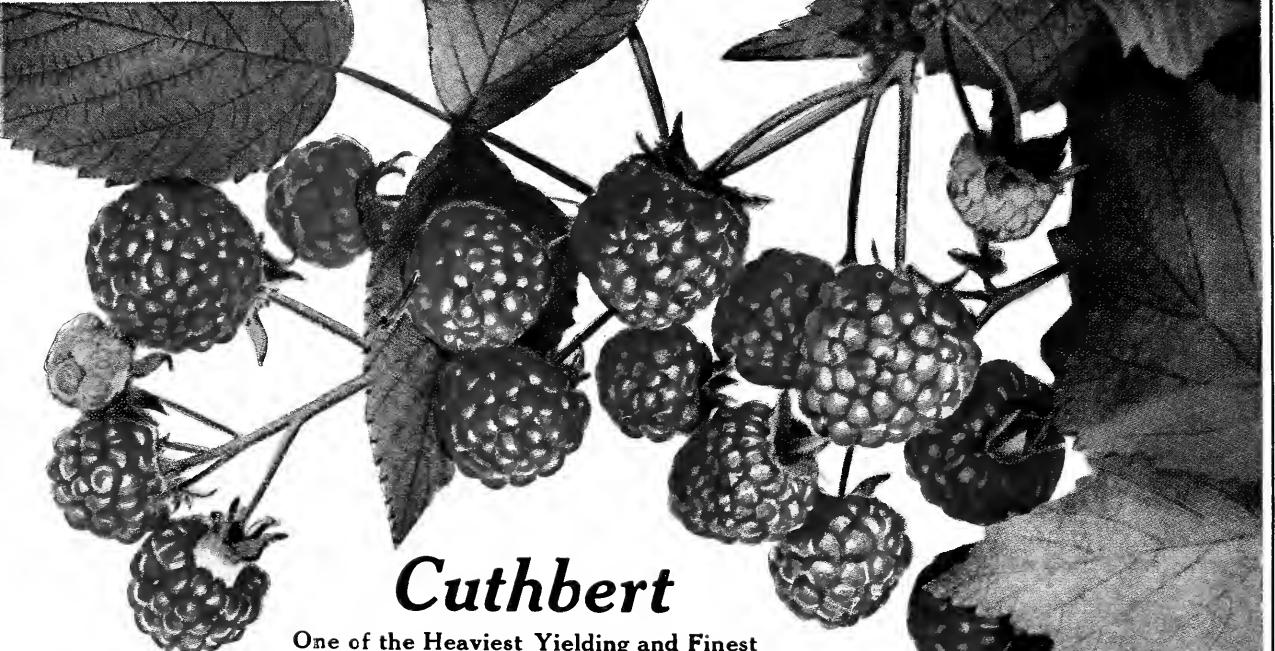
Wonderful Strawberry

Firmly Holds Popularity

IN one of many publications issued by authority of the Government at Washington, is found the impartial statement that the Gibson Strawberry is liked because it is hardy, and productive of large, attractive fruit, which reaches the market in good condition. Thousands of growers have added their enthusiastic endorsement. The Gibson has vigorous plants that are very hardy in bud and bloom, with foliage that is tough and resistant to drought, and they make runners freely. The bountiful crop of berries is uniform in size for a long season, and it is very popular with growers because it is so dependable a cropper, even withstanding frosts in sections where other varieties have been seriously hurt. Berries from Gibson plants of B. & H. quality always bring the highest market price. They are of bright crimson, or deep rich red, that goes all the way through, and combine firmness of texture with delicacy of flavor. We know of no Strawberry that will produce more quarts of berries to the acre. They are always delicious for immediate table use, and they are excellent for shipping or canning, as their quality, color and flavor hold up. The Gibson has been listed by some nurserymen who also list Pokomoke. We are not listing Pokomoke, as we are convinced that Pokomoke and Gibson are the same thing. If you want Pokomoke, we suggest that you order Gibson. You may be sure you are doing wisely when you put Gibson on your list, and order plants from Burmeister & Hartung's Northern grown stock.

Gibson.
Medium Early,
Staminate or
Perfect
Flowering.

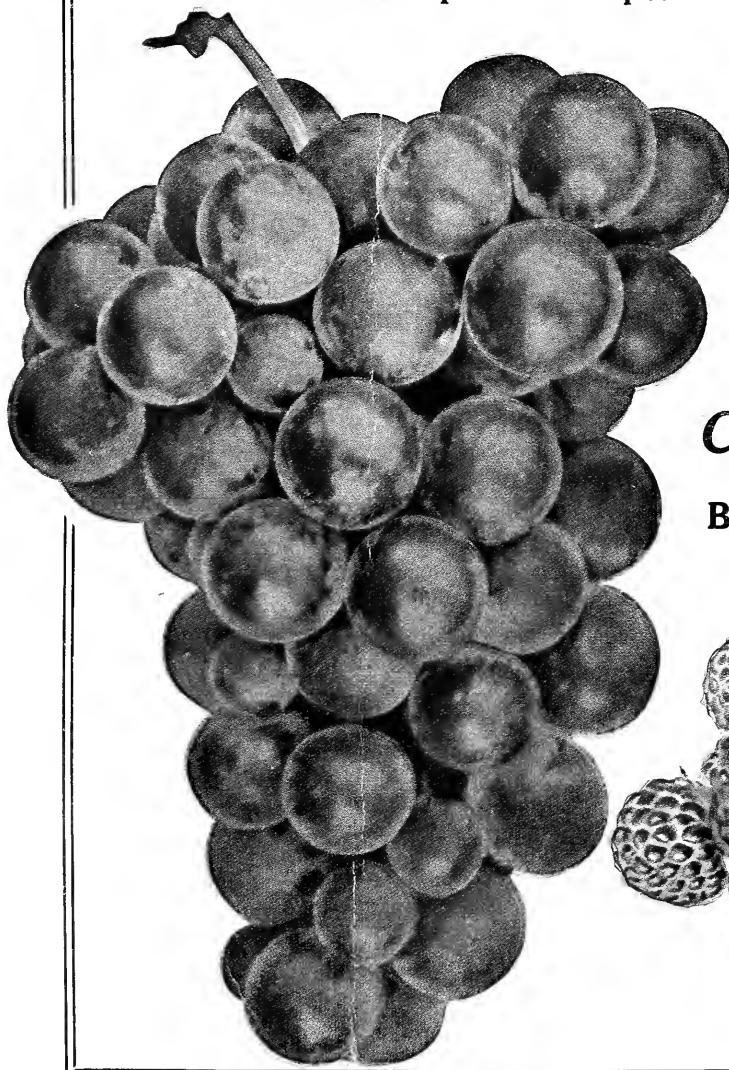




Cuthbert

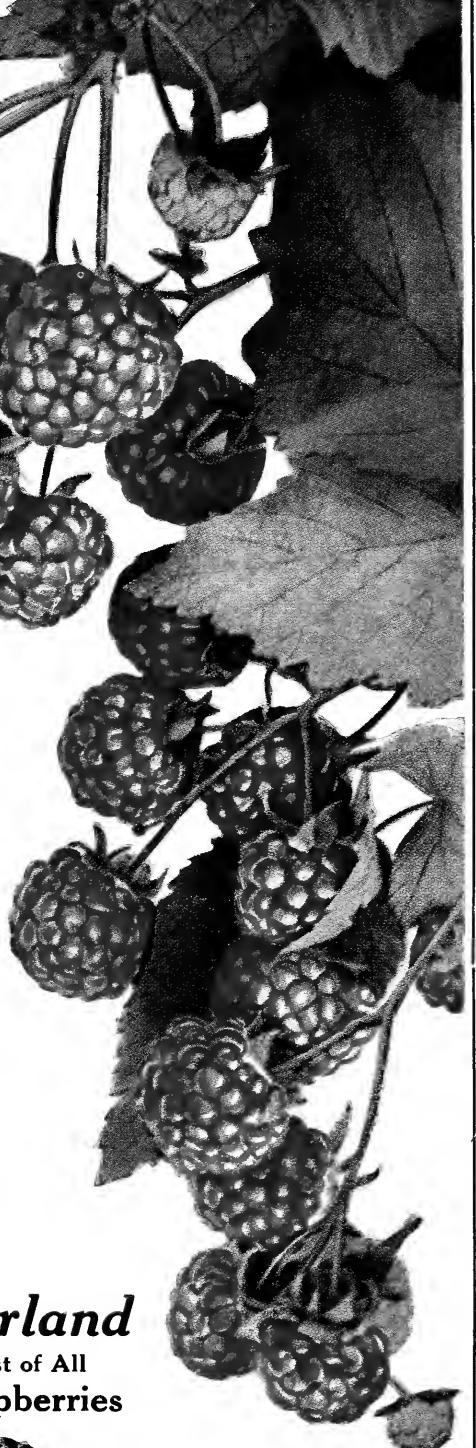
One of the Heaviest Yielding and Finest
Flavored

Red Raspberries



Concord

The Most Popular of Grapes



Cumberland

The Greatest of All
Black Raspberries